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Attorney Docket No.: 26505-502 NATL



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Oyelere et al.

SERIAL NUMBER : 10/577,903 EXAMINER : Not Yet Assigned

INTERNATIONAL FILING DATE : January 17, 2007 ART UNIT : 1614

FOR : BIFUNCTIONAL MACROLIDE HETEROCYCLIC COMPOUNDS AND METHODS OF MAKING AND USING THE SAME

Mail Stop Amendment
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Transmitted herewith for filing in the present application are the following documents:

1. Information Disclosure Statement (2 pages), in duplicate;
2. Modified Form 1449/PTO (7 pages), in duplicate;
3. Copies of Cited References: B1-B77; C1-C27; and
4. Return Postcard.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 542-6000, Boston, Massachusetts.

The Commissioner is authorized to charge any fees that may be due, or to credit any overpayment, to the undersigned's account, Deposit Account No. 50-0311 Ref. No. 26505-502 NATL. A duplicate copy of this transmittal letter is enclosed herewith.

Respectfully submitted,

Ivor R. Elrifi, Reg. No. 39,529
 Heidi A. Erlacher, Reg. No. 45,409
 Jennifer L. Loebach, Reg. No. 57,977
 Attorneys/Agents for Applicants
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Date: August 29, 2007



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Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicant hereby makes of record the documents listed on the attached modified Form PTO-1449, as well as copies of the listed documents.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action based on the merits in the above-identified case. Accordingly, no fee or certification is believed required. By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A1-A42 and U.S. Published Applications A43-A60 are not submitted.

It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and sign the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

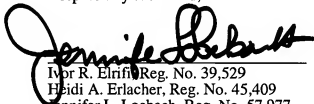
By submitting this Information Disclosure Statement, the Applicant makes no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

APPLICANTS: Oyelere et al.
U.S.S.N.: 10/577,903

Notwithstanding any statements by the Applicant, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested.

Please charge any fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 26505-502 NATL.

Respectfully submitted,



Ivor R. Elrifi, Reg. No. 39,529

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Jennifer L. Loebach, Reg. No. 57,977

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Attorney Docket No.: 26505-502 NATL

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PTO/SB (12-97)

Approved for use through 9/30/00. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Modified Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number		10/577,903	
				International Filing Date		January 17, 2007	
				First Named Inventor		Farmer	
				Group Art Unit		Not Yet Assigned	
				Examiner Name		Not Yet Assigned	
				Attorney Docket Number		26505-502 NATL (RIB-010)	
U.S. PATENT DOCUMENTS							
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	*A1	3,629,232	12/21/71	Peter Hadley Jones	260	210	
	*A2	3,681,325	08/01/72	Leslie Alan Freiberg	260	210	
	*A3	4,404,201	09/13/83	Haskell et al.	424	246	
	*A4	4,546,176	10/08/85	Machida et al.	544	21	
	*A5	5,180,719	01/19/93	White et al.	514	192	
	*A6	5,215,980	06/01/93	Jones	514	183	
	*A7	5,232,918	08/03/93	Arnould et al.	514	202	
	*A8	5,281,703	01/25/94	White et al.	540	302	
	*A9	5,336,768	08/09/94	Albrecht et al.	540	222	
	*A10	5,444,051	08/22/95	Agouridas et al.	514	29	
	*A11	5,527,780	06/18/96	Agouridas et al.	514	29	
	*A12	5,543,400	06/08/96	Agouridas et al.	514	29	
	*A13	5,658,888	08/19/97	Koga et al.	514	29	
	*A14	5,693,791	12/02/97	Truett	540	222	
	*A15	5,747,467	05/05/98	Agouridas et al.	514	29	
	*A16	5,780,605	07/14/98	Or et al.	536	7.2	
	*A17	5,866,549	02/02/99	Or et al.	514	29	
	*A18	5,891,643	04/06/99	Fesik et al.	435	7.1	
	*A19	5,905,144	05/18/99	Truett	536	22.1	
	*A20	5,955,440	09/21/99	Sauer et al.	514	29	
	*A21	6,020,521	02/01/00	Randolph et al.	560	205	
	*A22	6,034,069	03/07/00	Or et al.	514	29	
	*A23	6,274,715 B1	08/14/01	Or et al.	536	7.4	
	*A24	6,288,055 B1	09/11/01	Natarajan et al.	514	210.2	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /E.P./

	*A25	6,288,234 B1	09/11/01	Griffin	546	190	
	*A26	6,355,805 B1	03/12/02	Choi et al.	546	301	
	*A27	6,355,810 B1	03/12/02	Griffin et al.	548	574	
	*A28	6,362,371 B1	03/26/02	Moran et al.	564	365	
	*A29	6,395,724 B1	05/28/02	Judice et al.	514	183	
	*A30	6,420,354 B1	07/16/02	Marquess et al.	514	183	
	*A31	6,437,119 B1	08/20/02	Truett	540	215	
	*A32	6,446,032 B1	09/03/02	Schimmel	703	11	
	*A33	6,468,979 B1	10/22/02	Pellacini et al.	514	29	
	*A34	6,479,498 B1	11/12/02	Marquess et al.	514	256	
	*A35	6,566,509 B1	05/20/03	Griffin et al.	536	7.4	
	*A36	6,576,615 B2	06/10/03	Phan et al.	514	30	
	*A37	6,664,240 B2	12/16/03	Phan et al.	514	30	
	*A38	6,710,034 B2	03/23/04	Phan et al.	514	30	
	*A39	6,753,415 B2	06/22/04	Phan et al.	536	7.1	
	*A40	6,878,691 B2	04/12/05	Or et al.	514	29	
	*A41	7,091,196 B2	08/15/06	Wang et al.	514	183	
	*A42	7,129,221 B2	10/31/06	Or et al.	514	28	

U.S. PUBLISHED APPLICATION DOCUMENTS

Exam Initials	Cite No.	U.S. Published Application No.	Published Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	*A43	2002/0028943 A1	03/07/02	Griffin	546	223	
	*A44	2003/0092639 A1	05/15/03	Phan et al.	514	28	
	*A45	2003/0096764 A1	05/22/03	Phan et al.	514	28	
	*A46	2003/0158093 A1	08/21/03	Sun et al.	514	8	
	*A47	2003/0176670 A1	09/18/03	Griffin et al.	536	7.4	
	*A48	2003/0176848 A1	09/18/03	Gibson et al.	604	500	
	*A49	2003/0181399 A1	09/25/03	Wong et al.	514	35	
	*A50	2003/0203858 A1	10/30/03	Phan et al.	514	28	
	*A51	2003/0212010 A1	11/13/03	Phan et al.	514	28	
	*A52	2004/0014685 A1	01/22/04	Mercep et al.	514	26	
	*A53	2004/0077612 A1	04/22/04	Mercep et al.	514	175	
	*A54	2004/0097434 A1	05/20/04	Mercep et al.	514	28	
	*A55	2004/0157787 A1	08/12/04	Or et al.	514	28	
	*A56	2004/0235760 A1	11/25/04	Phan et al.	514	28	
	*A57	2005/0020823 A1	01/27/05	Phan et al.	536	7.1	
	*A58	2005/0197334 A1	09/08/05	Wang et al.	514	227.5	

	*A59	2006/0264385 A1	11/23/06	Wang et al.	514	28	
	*A60	2007/0072811 A1	03/29/07	Farmer et al.	514	23	
FOREIGN PATENT DOCUMENTS							
Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)		Date of Publication	Translation Yes No	
B1	DE	196 04 223 A1	BAYER AG		08/07/97	No	
B2	DE	100 34 627 A1	BAYER AG		01/31/02	No	
B3	EP	0 213 617 B1	KITASATO KENKYUSHO		03/11/87		
B4	EP	0 215 355 B1	KITASATO KENKYUSHO		03/25/87		
B5	EP	0 643 068 B1	CHUGAL SEIYAKU KABUSHIKI KAISHA		03/15/95		
B6	EP	0 680 967 B1	HOECHST MARION ROUSSEL		11/08/95	Claims only	
B7	EP	0 895 999 A1	PFIZER PRODUCTS INC.		02/10/99		
B8	EP	1 132 392 A1	PFIZER PRODUCTS INC.		09/12/01		
B9	EP	1 201 649 A1	PFIZER PRODUCTS INC.		05/02/02		
B10	EP	1 201 655 A2	PFIZER PRODUCTS INC.		05/02/02		
B11	WO	92/17184	SPECIAL ADVANCED BIOMATERIALS, INC.		10/15/92		
B12	WO	93/07154	PROCTER & GAMBLE PHARMACEUTICALS, INC.		04/15/93		
B13	WO	93/24509	CHUGAI SEIYAKYU KABUSHIKI KAISHA		12/09/93	Abstract only	
B14	WO	94/10185	CHUGAI SEIYAKYU KABUSHIKI KAISHA		05/11/94	Abstract only	
B15	WO	95/07271	THE UPJOHN COMPANY		03/16/95		
B16	WO	96/18633	ZAMBON GROUP S.P.A.		06/20/96		
B17	WO	97/35195	THE SALK INSTITUTE FOR BIOLOGICAL STUDIES		09/25/97		
B18	WO	97/48713	ABBOTT LABORATORIES		12/24/97		
B19	WO	98/56800	PFIZER PRODUCTS INC.		12/17/98		
B20	WO	98/56801	PFIZER PRODUCTS INC.		12/17/98		
B21	WO	99/16779	ABBOTT LABORATORIES		04/08/99		
B22	WO	99/22722	ABBOTT LABORATORIES		05/14/99		
B23	WO	99/28308	TRUETT, WILLIAM		08/10/99		
B24	WO	99/33839	CHEIL JEDANG CORPORATION		07/08/99		
B25	WO	99/63937 A3	ADVANCED MEDICINE, INC.		12/16/99		
B26	WO	99/64032	ADVANCED MEDICINE, INC.		12/16/99		
B27	WO	99/64049 A1	ADVANCED MEDICINE, INC.		12/16/99		
B28	WO	99/64416	ZENECA LIMITED		12/16/99		
B29	WO	99/64417	ZENECA LIMITED		12/16/99		
B30	WO	00/06606	ZAMBON GROUP S.P.A.		02/10/00		

B31	WO	00/21960	ZENECA LIMITED	04/20/00		
B32	WO	00/40589	PLIVA, FARMACEUTSKA INDUSTRIJA	07/13/00		
B33	WO	00/42055	ZAMBON GROUP S.P.A.	07/20/00		
B34	WO	00/77016 A1	PLIVA D.D.	12/21/00		
B35	WO	01/40222 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	06/07/01		
B36	WO	01/40236 A2	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	06/07/01		
B37	WO	01/40238 A1	ENICHEM S.P.A.	06/07/01		
B38	WO	01/42242 A1	ORTHO-MCNEIL PHARMACEUTICAL, INC.	06/14/01		
B39	WO	01/58885 A1	PHARMACIA & UPJOHN COMPANY	08/16/01		
B40	WO	01/80863 A1	THE SCRIPPS RESEARCH INSTITUTE	11/01/01		
B41	WO	01/81350 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	11/01/01		
B42	WO	02/051855 A2	KOSAN BIOSCIENCES, INC.	07/04/02		
B43	WO	02/060912 A1	ENANTA PHARMACEUTICALS, INC.	08/08/02		
B44	WO	02/080841 A2	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	10/17/02		
B45	WO	02/081468 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	10/17/02		
B46	WO	02/081469 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	10/17/02		
B47	WO	02/081470 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	10/17/02		
B48	WO	02/096890 A2	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	12/05/02		
B49	WO	02/096916 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	12/05/02		
B50	WO	03/022824 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	03/20/03		
B51	WO	03/035073 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	05/01/03		
B52	WO	03/035648 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	05/01/03		
B53	WO	03/042228 A1	GLAXO GROUP LIMITED; PLIVA D.D.	05/22/03		
B54	WO	03/070173 A2	SYMPORE GMBH	08/28/03		
B55	WO	03/070174 A2	SYMPORE GMBH	08/28/03		
B56	WO	03/070254 A1	SYMPORE GMBH	08/28/03		
B57	WO	03/072575 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	09/04/03		
B58	WO	2004/005309 A2	PLIVA D.D.	01/15/04		
B59	WO	2004/005310 A2	PLIVA D.D.	01/15/04		
B60	WO	2004/005313 A2	PLIVA D.D.	01/15/04		
B61	WO	2004/013153 A2	ZAMBON GROUP S.P.A.	02/12/04		
B62	WO	2004/043984 A1	PLIVA D.D.	05/27/04		

B63	WO	2004/048392 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	06/10/04		
B64	WO	2004/056817 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	07/08/04		
B65	WO	2004/056818 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	07/08/04		
B66	WO	2004/056819 A1	ASTRAZENECA AB; ASTRAZENECA UK LIMITED	07/08/04		
B67	WO	2004/078770 A1	RIB-X PHARMACEUTICALS, INC.	09/16/04		
B68	WO	2004/080391 A2	OPTIMER PHARMACEUTICALS, INC.	09/23/04		
B69	WO	2004/094449 A1	PLIVA PHARMACEUTICAL INDUSTRY, INC.	11/04/04		
B70	WO	2004/096221 A1	MORPHOCHEM AKTIENGESellschaft FÜR KOMBINATORISCHE CHEMIE	11/11/04		
B71	WO	2004/108745 A2	ENANTA PHARMACEUTICALS, INC.	12/16/04		
B72	WO	2004/108746 A2	ENANTA PHARMACEUTICALS, INC.	12/16/04		
B73	WO	2005/030786 A1	RANBAXY LABORATORIES LIMITED	04/07/05		
B74	WO	2005/042554 A1	RIB-X PHARMACEUTICALS, INC.	05/12/05		
B75	WO	2005/049632 A1	RIB-X PHARMACEUTICALS, INC.	08/02/05		
B76	WO	2005/075494 A1	ZAMBON GROUP S.P.A.	08/18/05		
B77	WO	2005/085266 A2	RIB-X PHARMACEUTICALS, INC.	09/15/05		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C1	Akritopoulou-Zanze et al., "Synthesis and antibacterial activity of novel bifunctional macrolides", <i>Bioorg. Med. Chem. Lett.</i> , pgs. 1-5 (2005)
	C2	Brandt-Rauf et al., "Fluorescent assay for estimating the binding of erythromycin derivatives to ribosomes", <i>Antimicrob. Agents Chemother.</i> , 14(1):88-94 (1978)
	C3	Costa et al., "Hybrids of macrolides and nucleobases or nucleosides", <i>Tetrahedron Lett.</i> , 41:3371-3375 (2000)
	C4	Denis et al., "Novel N-demethylation of ketolide: application to the solution phase parallel synthesis of N-desosamyl-substituted ketolides using ion exchange resins", <i>Tetrahedron Lett.</i> , 43:4171-4174 (2002)
	C5	Faghni et al., "Synthesis of 9-deoxy-4'-deoxy-6,9-epoxyerythromycin derivatives: novel and acid-stable motilides", <i>J. Med. Chem.</i> , 41(18):3402-3408 (1998)
	C6	Gregory et al., "Antibacterials. Synthesis and structure-activity studies of 3-aryl-2-oxooxazolidines. I. The "B" group", <i>J. Med. Chem.</i> , 32(8):1673-1681 (1989)
	C7	Hecker et al., "Application of hygromycin a structure activity relationships to the antibiotic a201a", <i>Bioorg. Med. Chem. Lett.</i> , 3(2):295-298 (1993)
	C8	Henessian et al., "Quantamycin: a computer-simulated new-generation inhibitor of bacterial ribosomal binding", <i>J. Am. Chem. Soc.</i> , 106:6114-6115 (1984)
	C9	Holmes et al., "Novel dimeric penicillin derived inhibitors of HIV-1 proteinase: interaction with the catalytic aspartates", <i>Bioorg. Med. Chem. Lett.</i> , 3(4):503-508 (1993)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C10	Hwang et al., "1,3-dipolar cycloaddition of nitrile oxides to 1-phenylsulfonyl-1,3-butadienes:synthesis of 3-(4,5-dihydroisoxazol-5-yl)pyrroles", <i>Tetrahedron Lett.</i> , 43:53-56 (2002)
	C11	Jones et al., "Chemical modifications of erythromycin antibiotics. I. 3'-De(dimethylamino)erythromycin A and B", <i>Chem. Modif. Erythromycin Antibiotics</i> , 33(2):665-670 (1968)
	C12	Liang et al., "Synthesis and biological activity of new 5-O-sugar modified ketolide and 2-fluoro-ketolide antibiotics", <i>Bioorg. Med. Chem. Lett.</i> , 15:1307-1310 (2005)
	C13	Mereu et al., "Design, synthesis and in vivo activity of 9-(S)-dihydroerythromycin derivatives as potent anti-inflammatory agents", <i>Bioorg. Med. Chem. Lett.</i> , 16:5801-5804 (2006)
	C14	Mutak et al., "Semisynthetic macrolide antibacterials derived from tylosin. Synthesis and structure-activity relationships of novel desmycosin analogues", <i>J. Med. Chem.</i> , 47(2):411-431 (2004)
	C15	Phan et al., "Synthesis and antibacterial activity of a novel class of 4'-substituted 16-membered ring macrolides derived from tylosin", <i>J. Med. Chem.</i> , 47(12):2965-2968 (2004)
	C16	Phillips et al., "Synthesis and antibacterial activity of 5-substituted oxazolidinones", <i>Bioorg. Med. Chem.</i> , 11:35-41 (2003)
	C17	Randolph et al., "Elimination of antibacterial activities of non-peptide luteinizing hormone-releasing hormone (LHRH) antagonists derived from erythromycin A", <i>Bioorg. Med. Chem. Lett.</i> , 14:1599-1602 (2004)
	C18	Rao et al., "Tight binding of a dimeric derivative of vancomycin with dimeric L-Lys-D-Ala-D-Ala" <i>J. Am. Chem. Soc.</i> , 119(43):10286-10290 (1997)
	C19	SciFinder Database entry for WO 93/24509, pgs.1-3 (2003)
	C20	SciFinder Database entry for WO 94/10185, pgs.1-3 (2003)
	C21	Shuker et al., "Discovering high-affinity ligands for proteins: SAR by NMR", <i>Science</i> , 274:1531-1543 (2003)
	C22	Stenmark et al., "Biomimetic synthesis of macrolide/ketolide metabolites through a selective N-demethylation reaction", <i>J. Org. Chem.</i> , 65(12):3875-3876 (2000)
	C23	Vince et al., "Chloramphenicol binding site with analogues of chloramphenicol and puromycin", <i>Antimicrob. Agents Chemother.</i> , 8(4):439-443 (1975)
	C24	Wang et al., "Dimeric aminoglycosides: design, synthesis and RNA binding", <i>Bioorg. Med. Chem. Lett.</i> , 7(14):1951-1956 (1997)
	C25	Welch et al., "An inhibitor of ribosomal peptidyl transferase using transition-state analogy", <i>Biochem.</i> , 34(2):385-390 (1995)
	C26	Žemlička et al., "Sparsophtenicol: a new synthetic hybrid antibiotic inhibiting ribosomal peptide synthesis", <i>J. Med. Chem.</i> , 25(10):1123-1125 (1982)

	C27	Žemlička et al., "Hybrid of antibiotics inhibiting protein synthesis. Synthesis and biological activity", <i>J. Med. Chem.</i> , 36(9):1239-1244 (1993)
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*** By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A1-A42 and of the U.S. Published Applications A43-A60 are not submitted.**

Examiner Signature	/Elli Peselev/	Date Considered	08/27/2008
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ACTIVE 4126630v.1